

Agency: 461 Department of Ecology
Decision Package Code/Title: AM Spokane River PCB Source Abatement

Budget Period: 2013-15
Budget Level: PL - Performance Level

Recommendation Summary Text:

Sampling in the Spokane River has consistently found elevated levels of PCBs (polychlorinated biphenyls) that pose an ongoing public and environmental health risk. This request supports an approach to reducing PCBs in the river over the next five years that will result in improvements to water quality while avoiding additional regulation. Ecology and the newly-formed Spokane River Regional Toxics Task Force (Task Force) are identifying PCB sources that pollute the river. The Task Force is required to review the Toxic Management Plans (TMPs) prepared by dischargers and identify priority actions to improve water quality as part of the Spokane River National Pollutant Discharge Elimination System permits memorandum of agreement. The Toxic Management Plans are due in April 2013. This request will 1) jump start the Task Force's high priority recommendations to reduce sources of PCBs and monitor their effectiveness; 2) assess alternatives to PCB-containing inks, dyes, and paint pigments discharged to the river; and 3) evaluate the levels of PCBs in consumer products, such as motor oil or caulk, and their contribution to PCB loading. (State Toxics Control Account)

Fiscal Detail

Operating Expenditures	<u>FY 2014</u>	<u>FY 2015</u>	<u>Total</u>
173-1 State Toxics Control Account-State	439,136	560,870	1,000,006
Total Cost	439,136	560,870	1,000,006
Staffing	<u>FY 2014</u>	<u>FY 2015</u>	<u>Annual Average</u>
FTEs	1.2	1.2	1.2

Package Description:

The Task Force was established in 2012 as a new model for developing a comprehensive, problem solving approach to bring the Spokane River into compliance with applicable water quality standards for PCBs. The Task Force, facilitated by the Ruckelshaus Center, represents municipal and industrial dischargers, conservation and environmental interests, tribes, the Spokane health district, and state and federal environmental agencies. For the municipal and industrial wastewater dischargers to the river, participating in the Task Force is a requirement in the water quality permits issued by Ecology in 2011. The Idaho facilities that discharge to the river are expected to receive permits from the U.S. Environmental Protection Agency (EPA) in 2012 that may include a similar requirement.

PCBs are a family of man-made, chlorinated chemical compounds that were once used in a variety of applications, such as insulating fluids for electric transformers and capacitors, paint additives, adhesives, caulks, inks, carbonless (mimeograph) paper, lubricants, and hydraulic fluids. PCBs are a persistent bioaccumulative pollutant, meaning they remain in the environment long after they were first introduced, and they build up in the food chain. Even though producing PCBs was banned in the United States in 1979 because of concerns about toxicity and their persistence in the environment, research has found very low levels of PCBs are still found nearly everywhere in the environment.

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The Task Force is examining data from previous Spokane River studies and proposing future studies to fill in any missing information. The Task Force is compiling comprehensive information to gain an understanding of the how much PCB pollution is getting to the Spokane River, where it is located, and how it got there in the first place. Using this information, individual dischargers must prepare Toxics Management Plans (TMPs) for controlling and reducing the sources of PCBs. The TMPs are due to Ecology and the Task Force in April 2013.

Municipal and industrial wastewater discharge permits require that Ecology define what constitutes "measurable progress" toward the goal of meeting water quality standards. If measurable progress is not made in locating and controlling sources, Ecology will pursue more traditional approaches, such as developing a total maximum daily load report or TMDL. The TMDL process establishes how much pollution a body of water can receive and still meet water quality standards. It also establishes enforceable limits for dischargers.

The Task Force approach is expected to be faster, less cumbersome, and more effective at reducing pollutant loading to the river than the TMDL process. The Task Force represents a new model for achieving water quality improvements and standards.

This request will support priority actions identified by the Task Force and alternative approaches to addressing toxics in impaired water bodies. Funding the following projects demonstrates Ecology's commitment to this approach.

1. Implement TMPs and conduct effectiveness monitoring to reduce PCBs through recommended prevention actions, including developing local ordinances to require use of PCB-free products and materials.
2. Assess alternatives to chlorinated solvents used to make inks and dyes. If safer alternatives are identified, manufacturers would be encouraged to re-think their use of PCB containing pigments, eventually leading to elimination of this source of PCBs. If PCB containing pigments are no longer used, this will eliminate a source of PCBs, both to the Spokane River and for other areas where inks and dyes are made or recycled. This project also supports Ecology's strategy to spur the use of safer alternatives.
3. Test consumer products that are suspected sources of PCBs in the Spokane watershed. This will support the Task Force recommendations and help pinpoint where additional actions are needed.

Providing support to coordinate these three projects is critical to keeping the Task Force functional and moving forward. It is necessary to implement on-the-ground actions to eliminate PCB sources as they are discovered and monitor water quality to ensure that fixed problems stay fixed.

The work of the Task Force will complement the Spokane Urban Waters Program and recommendations found in its 2012 Progress Report. Since its creation in 2007, Ecology's Urban Waters Program has used a combination of business visits and sampling to find PCB and other toxic sources. Investigators use the appropriate regulation from the Resource Conservation and Recovery Act, Clean Water Act, and the Model Toxics Control Act to eliminate the sources of contamination. Urban Waters efforts help clean up toxic sites, improve water quality through controlling stormwater pollution, and ensure safe hazardous waste management, which avoids contamination of soil and water. Working together, the Urban Waters program and the Task Force will gain a more comprehensive understanding of PCB sources to the Spokane River.

The proposed project elements are outlined below.

1. Implement TMPs and Conduct Effectiveness Monitoring to reduce PCBs - \$500,000

The Task Force is required to prioritize TMP actions as part of the Spokane River National Pollutant Discharge Elimination System (NPDES) permits memorandum of agreement. The prioritized actions are due in April 2013. This request reserves \$500,000 for funding implementation of priority TMP action items and monitoring the effectiveness of these actions. It specifically aids Task Force local governments by providing start up money to implement on-the-ground PCB solutions they identify in their forthcoming TMPs. Finding and reducing PCB sources identified in individual plans is the key to keeping Spokane businesses and municipalities in compliance with their current NPDES permits.

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While this proposal cannot yet specify which TMP actions will be funded, a prioritized list of actions will be available by the start of the 2013-15 biennium. Early actions need to be funded and implemented soon after the April 2013 report to meet 2017 permit compliance requirements. This will allow local governments the necessary time to plan, approve, contract, and construct facilities or implement reduction strategies such as requiring the use of PCB-free products and materials. Meeting the 2017 requirements is a critical demonstration that alternative regulatory approaches can be successful. Task Force success will also demonstrate that the model has potential statewide application. Providing water quality implementation tools is especially important if future fish consumption rate work drives stricter water quality standards in impaired waterways.

Finding PCB sources and preventing future releases will help ensure that what gets fixed stays fixed. A key requirement of the Task Force is "development and implementation of a monitoring plan for the Spokane River that, (1) establishes the baseline conditions for PCBs and the other identified toxics, (2) monitors and assesses the effectiveness of toxic reduction measures, and (3) can be adapted to take into account newly generated data and sampling techniques." Providing partial funding to initiate the Spokane River Monitoring Plan is essential if the Task Force is to prove its strategies are reducing the sources of toxics to the river. Monitoring will demonstrate whether measureable progress is being achieved to reduce PCBs as required in the existing NPDES permits.

2. Assess Alternatives to Chlorinated Solvents Used to Make Inks and Dyes - \$300,000

The Task Force will identify products inadvertently containing PCBs. Some significant inadvertent sources of PCBs that have already been identified are ink, dyes, and paint pigments. Finding viable non-PCB containing inks, dyes, and paints is a way to reduce PCB sources to the river. Simply identifying a chemical of concern, even banning it, is not sufficient to ensure the chosen alternative is safer than the chemical it is replacing. An alternatives assessment provides the information needed to make informed choices about chemical use. It is used for identifying and comparing potential chemical and non-chemical alternatives that can be used as substitutes to replace chemicals or technologies of high concern. It typically consists of reviewing a number of components that define the impact of a chemical (cost, availability, toxicity, potential for exposure, performance, lifecycle costs, etc.).

If safer alternatives to PCB containing inks and dyes are found, the Task Force will have enough information to pursue actions to eliminate sources. Actions could include: petitioning the EPA to place further restrictions of PCBs in products; developing local ordinances regulating the sale of such products; developing Best Management Practices to reduce impacts; and providing technical assistance to help users of PCB containing pigments switch to safer alternatives. Such actions will result in reduced sources of PCBs to the Spokane River. For example, if we can reduce PCBs in recycled paper, the amount of PCBs found in effluent from recycle plants, such as Inland Empire Paper, would be correspondingly reduced. This part of the request will fund an alternatives assessment for PCB-containing inks, dyes, and paint pigments already identified as a concern in the Spokane River.

3. Test Consumer Products that are Suspected Sources of PCBs in the Spokane Watershed - \$200,000

PCB loading in the Spokane River is not from just a few isolated point sources; it is often diffuse and difficult to trace. So it is important to determine the extent of non-point sources of PCBs from widespread use of consumer products, such as motor oil, hydraulic fluid, soaps, and caulk. Select consumer products testing will address toxic harm being caused by multiple non-point sources rather than by single, large point source dischargers. If PCB containing products are identified, the Task Force would use that information to develop source reducing activities similar to those discussed above for PCB containing inks and dyes.

PCB impacts from motor oil and caulk are already an emerging concern in the Spokane basin and will likely be identified in TMPs as top consumer products to gather baseline data on. Funding of this task will be used to test selected products such as motor oil and caulk for levels of PCBs and evaluate the extent of harm from these commercial and consumer products on PCB pollution in the river.

Project support - 1.0 FTE for 2013-15

Coordinating these three efforts will be supported by one project FTE over the 2013-15 biennium. Working with the Task Force and

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Urban Waters staff, the project coordinator will also create a master document incorporating the body of literature on PCB source tracing and elimination collected over the past three years, along with source lists. This supports another 2012 Spokane Urban Waters Progress Report recommendation. The cost of the FTE is included in the amounts identified for each of the above three efforts.

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Narrative Justification and Impact Statement

What specific performance outcomes does the agency expect?

The outcome of this request will be reduced sources of PCBs to the Spokane River, ultimately leading to improved water quality and reduced costs of compliance with the federal Clean Water Act. Funding will allow Ecology and/or the Task Force members to implement on-the-ground actions to eliminate PCB sources from the Spokane River more quickly than would be achieved using more traditional approaches such as a TMDL.

Performance Measure Detail

Activity: A006 Clean Up Polluted Waters		Incremental Changes	
		<u>FY 2014</u>	<u>FY 2015</u>
	Measures		
001655	Refer to Narrative Justification	0.00	0.00
Activity: A032 Prevent Point Source Water Pollution		Incremental Changes	
		<u>FY 2014</u>	<u>FY 2015</u>
	Measures		
001655	Refer to Narrative Justification	0.00	0.00
Activity: A065 Reduce Toxic Chemicals in Products and Promote Safer Alternatives		Incremental Changes	
		<u>FY 2014</u>	<u>FY 2015</u>
	Measures		
001655	Refer to Narrative Justification	0.00	0.00

Is this decision package essential to implement a strategy identified in the agency's strategic plan?

This request is essential to implementing Ecology's strategic priorities: "Reduce Toxic Threats" and "Support Successful Water Management and Healthy Watersheds." Using a new model for identifying and eliminating PCB and other toxics of concern from

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entering the environment provides a valuable tool for attaining Ecology's objectives identified in the strategic plan to improve water quality and reduce the use of toxic chemicals.

Does this decision package provide essential support to one of the Governor's priorities?

This request provides essential support to the Governor's priority to "Reduce Toxic Threats" by implementing actions that will eliminate sources of PCB contamination of the Spokane River. Ecology will apply its successes in the Spokane River to other waters - Puget Sound, in particular.

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process?

This request makes a key contribution to the statewide result, "Improve the Quality of Natural Resources," by supporting Ecology's Activity A032, "Prevent Point Source Water Pollution," which ranked as the 15th highest natural resource activity in 2010. The request supports Ecology's Activity A065, "Reducing Toxic Chemicals in Products and Promoting Safer Alternatives." This activity was established in 2010 and was not included in the 2010 Priorities of Government prioritization.

What are the other important connections or impacts related to this proposal?

This request will directly support recommendations of the Task Force by implementing and evaluating priority source control actions. The Task Force is comprised of stakeholders in the watershed, and includes municipal and industrial dischargers, conservation and environmental interests, tribes, the Spokane health district, and state and federal environmental agencies.

The Task Force's work will complement the Spokane Urban Waters Program. The Urban Waters focus has been on sewer and storm system sampling and source tracing to identify PCB sources to the river. Urban Waters staff work directly with area businesses to improve water quality through controlling stormwater pollution and ensure safe hazardous waste management, which avoids contamination of soil and water.

What alternatives were explored by the agency, and why was this alternative chosen?

This alternative was chosen because it is a one-time expenditure to deploy actions that are already being planned by an existing stakeholder group. This request will push the plan into action. We did not want to duplicate planning efforts. We want to set the plans in motion in areas that eliminate PCB sources and monitor results to ensure progress.

What are the consequences of not funding this package?

Currently no funding has been identified to support implementation actions of the Task Force. This funding will jump start implementation of priority source control actions. If funding is not provided, permittees risk being out of compliance with NPDES permits by not showing measurable progress in reducing PCB levels.

If measurable progress is not made in locating and controlling sources, Ecology would be required to pursue more traditional, time consuming and costly approaches, such as developing a total maximum daily load report or TMDL. Source reduction strategies would likely be delayed until the TMDL is completed and regulatory requirements to limit PCB releases to the river are added into dischargers' permits.

What is the relationship, if any, to the state's capital budget?

None

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What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None

Expenditure and revenue calculations and assumptions

This request includes one project position for a two-year period at the Environmental Specialist 4 level, range 55.

In addition to the agency standard described below, Object E includes purchased services of:

- \$438,200 to Implement Toxics Management Plans
- \$258,800 to Assess Alternatives for Inks and Dyes
- \$ 97,000 to Test Consumer Products

The alternatives assessment and consumer product pesting are based on previous contracted work for specific chemicals and products. The alternatives assessment includes lab support, as well as identifying alternatives and assessing and comparing risks and hazards.

Explanation of costs by object:

Salary estimates are current actual rates plus three percent, at step G. Employee benefits are the agency standard average of 33.1 percent of salaries. Goods and services are the agency standard average of \$5,008 per direct program FTE per fiscal year. Travel is the agency standard average of \$1,097 per direct program FTE per fiscal year. Equipment is the agency standard for start-up of new positions of \$2,666 per new direct program position in the first year only and is shown in Object J. Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 35.1 percent of program salaries and benefits and is shown in object T. Administration program FTEs are included at 0.15 FTE per direct program FTE.

Which costs and functions are one-time? Which are ongoing? What are the budget impacts in future biennia?

All costs in this request are one time.

<u>Object Detail</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Total</u>
A Salaries And Wages	53,146	53,146	106,292
B Employee Benefits	17,591	17,591	35,182
E Goods And Services	339,808	464,208	804,016
G Travel	1,097	1,097	2,194
J Capital Outlays	2,666		2,666
T Intra-Agency Reimbursements	24,828	24,828	49,656
Total Objects	439,136	560,870	1,000,006

